

I claim:

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1. A campfire apparatus adapted to be placed in an assembled state on a support surface and connected to a source of fuel, comprising:

(a) a base adapted to rest on the support surface when in the assembled state;

(b) a fire pan adapted to be supported by said base when in the assembled state, said fire pan including a main body portion having an inner surface, an upper rim and a pan interior;

(c) when in the assembled state, and having at least one gas outlet operative to introduce vaporized fuel into the pan interior when connected to the source of fuel; and

(d) a quantity of low-density, non-flammable particulate material adapted to be disposed in said fire pan at a depth sufficient to cover said gas manifold when in the assembled state.

2. A campfire apparatus according to claim 1 including a connector associated with said gas manifold and adapted to connect to the source of fuel when in an assembled state.

3. A campfire apparatus according to claim 1 wherein said particulate material is selected from a group consisting of clay, shale, slate, and slag particles, zeolites, alumina hydrates, borates, perlite, vermiculite, beach sand, volcanic sand and sandblasting sand.

4. A campfire apparatus according to claim 1 wherein said particulate material is vermiculite.

5. A campfire apparatus according to claim 1 including a lid sized and adapted to enclose said pan interior when placed thereon in a mounted state, with a portion of said lid being supported by a portion of said main body.

6. A campfire apparatus according to claim 5 wherein said upper rim extends continuously around said fire pan and including an inwardly projecting shoulder portion disposed on said upper rim, said shoulder portion operative to support said lid when said lid is in the mounted state.

7. A campfire apparatus according to claim 1 including a spacer adapted to be interposed between said fire pan and said base when in the assembled state so that said base supports said spacer and said spacer supports said fire pan.

8. A campfire apparatus according to claim 1 wherein said gas manifold has a selected size and a shape selected from a group consisting of toroidal, serpentine, linear and linearly angled shapes.

9. A campfire apparatus according to claim 1 wherein said gas manifold outlet is shaped so as to extend circumjacent to the inner surface of said fire pan when in the assembled state and operative when connected to a source of fuel to direct vaporized fuel laterally toward an axis that is perpendicular to the plane containing the rim of said fire pan.

10. A campfire apparatus according to claim 9 including a plurality of ports formed in spaced apart relation to one another around said manifold thereby to define a plurality of gas outlets therefor.

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11. A campfire apparatus according to claim 1 wherein said fire pan is configured as a geometric shell selected from a group consisting of: a portion of a spherical shell, a truncated pyramidal shell, a rectangular parallelepiped shell, a polyhedral shell, a conical shell, a cylindrical shell and a pyramidal shell.

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12. A campfire apparatus according to claim 11 wherein said fire pan, and said base are of substantially the same size and shape.

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13. A campfire apparatus according to claim 12 including a lid sized and adapted to enclose said interior pan when placed thereon in a mounted state with a portion of said lid being supported by a portion of said main body, and wherein said lid has substantially the same geometric structure as said fire pan and said base.

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14. A campfire apparatus according to claim 1 wherein said upper rim extends in a plane parallel to said support surface when in an upright position, and when in a tipped-over position, the plane of said upper rim is oriented at no less than ninety degrees to said support surface.

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15. A portable camping stove adapted to be placed on a support surface and connect to a source of fuel, comprising:

(a) a base operative adapted to rest on a support surface, said base constructed as a shell with a lower rim so as to have a base interior, said base having a selected geometric configuration and size;

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(b) a fire pan including a main body portion constructed as a shell with an upper rim so as to have a pan interior, said shell having a selected geometric configuration and size, said base and said fire

pan being secured to one another so that the base interior and the pan interior are oppositely opening; and

(c) a gas manifold disposed in the pan interior and having at least one gas outlet operative to introduce vaporized fuel into the pan interior when connected to the source of fuel.

16. A portable camping stove according to claim 15 including a connector associated with said gas manifold and adapted to connect to a source of fuel.

17. A portable camping stove according to claim 15 including a spacer having a hollow interior and interposed between said base and said fire pan.

18. A portable camping stove according to claim 15 wherein said fire pan has a central pan axis and said base has a central base axis, said base and said fire pan secured together such that the central base axis and said central pan axis are co-linear.

19. A portable camping stove according to claim 18 including a spacer having a hollow interior and interposed between said base and said fire pan and at least one bolt interconnecting said fire pan and said base, said bolt passing through the interior of said spacer.

20. A portable camping stove according to claim 15 including a lid sized and adapted to enclose said interior pan when placed thereon in a mounted state with a portion of said lid being supported by a portion of said main body.

21. A portable camping stove according to claim 20 including an inwardly projecting shoulder portion disposed on said upper rim and

extending continuously around said fire pan, said shoulder portion adapted to support said lid when in a mounted state.

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AB } 22. A portable according to claim 15 including a plurality of ports formed in spaced-apart relation to one another around said manifold thereby to define a plurality of gas outlets therefor.

23. A portable camping stove adapted to be placed on a support surface and connect to a source of fuel, comprising:

(a) a fire pan including a main body portion constructed as a shell having a central pan axis and with an upper rim and a pan interior, said shell having a selected geometric configuration and size;

(b) a base operative to rest on the support surface, said base constructed as a shell having a central base axis and with a lower rim and a base interior, said base having the selected geometric configuration and size, said base;

(c) a spacer formed as a hollow connector and interposed between said fire pan and said base such that when connected together, the central pan axis and the central base axis are co-linear and the pan interior and the base interior are in an opposed relationship;

(d) a gas manifold disposed in the interior of said fire pan and having at least one gas outlet operative to introduce vaporized fuel into the interior of said fire pan when connected to the source of fuel;

(e) a connector associated with said gas manifold and adapted to connect to the source of fuel;

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(f) a lid constructed as a shell having the selected geometric configuration and size; and

(g) a quantity of low density, fire-retardant material disposed in said fire pan at a depth sufficient to cover said gas manifold.

24. A campfire apparatus adapted to be placed in an assembled state on a support surface, comprising:

(a) a base adapted to rest on the support surface when in the assembled state;

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(b) a fire pan adapted to be supported by said base when in the assembled state, said fire pan including a main body portion having an inner surface, an upper rim and a pan interior;

(c) a reservoir adapted to provide a source of fuel;

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(d) a gas manifold adapted to be disposed in the pan interior when in the assembled state, and having at least one gas outlet operative to introduce vaporized fuel into the pan interior when connected to said source of fuel; and

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(e) a quantity of low-density, non-flammable particulate material adapted to be disposed in said fire pan at a depth sufficient to cover said gas manifold when in the assembled state.

25. A method of providing an artificial campfire on a support surface, comprising the steps of:

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(a) providing a fire pan having an interior and wherein said fire pan includes a gas manifold disposed in the interior thereof with said manifold having at least one gas outlet operative to introduce vaporized fuel into the interior of said fire pan;

(b) supporting said fire pan in spaced relation to the support surface such that the interior thereof is upwardly opening;

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(c) placing a quantity of low density, fire retardant particulate material in said fire pan at a depth sufficient to cover said gas manifold thereby to achieve a surface spaced completely above said gas manifold;

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(d) introducing a fuel into said manifold at a pressure sufficient so that vaporized fuel is injected into the particulate material in a manner whereby the vaporized fuel migrates upwardly therethrough without igniting until it reaches the surface; and

(e) igniting said vaporized fuel along the surface of said particulate material.

26. A method according to claim 25 wherein said particulate material is selected from a group consisting of clay, shale, slate, and slag particles, zeolites, alumina hydrates, borates, perlite, vermiculite, beach sand, volcanic sand and sandblasting sand.

27. A method according to claim 24 wherein said particulate material is vermiculite.

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